

## CLAIMS

1. A bacterial strain, characterized in that it has a DNA sequence, at least part of which is capable of hybridizing with genomic or plasmid DNA of the strain deposited on December 5, 2002, under the No. I-2962, with the Collection Nationale de Cultures de Microorganismes (C.N.C.M.) [French national collection of microorganism cultures].

2. The bacterial strain as claimed in claim 1, characterized in that at least 70% of its genome is capable of hybridizing with the DNA of the deposited strain.

3. The bacterial strain as claimed in claim 1 or 2, characterized by the sequence SEQ ID No. 1 of the 16S rRNA:

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CGGTGCCTAATACATGCAAGTCGAGCGCAGGAAGCCGTCTGAACCCTTCGGGGGGACGACGGTGGAATGA
GCGGCGGSACG
GGTGAGTAACACGTAAAGAACCTGCCCATAGGTCTGGGATAACCACGAGAAATCGGGGGCTAATACCGGAT
GTGTCATCGG
ACCGCATGGTCCGCTGATGAAAGGCGCTCCGGCGTCGCCCATGGATGGCTTTGCGGTGCATTAGCTAGTT
GGTGGGGTAA
CGGCCCCACCAAGGCGACGATGCATAGCCGACCTGAGAGGGTGATCGGCCACACTGGGACTGAGACACGGC
CCAGACTCCT
ACGGGAGGCGAGCAGTAGGGAATCTTCCACAATGGACGAAAGTCTGATGGAGCAACGCCGCGTGAACGATG
AAGGCTTTTCG
GGTCGTAAAGTTCTGTTGTAAGGGAAGAACAAGTGCCGCGAGGCAATGGCGGCACCTTGACGGTACCTTGC
GAGAAAGCCA
CGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTGTCCGGAATTATTGGGCGTAA
AGCGCGCGCA
GGCGGCCTCTTAAGTCTGATGTGAAAGCCCCCGCTCAACCGGGGAGGGCCATTGGAAACTGGGAGGCTT
GAGTATAGGA
GAGAAGAGTGGAATTCCACGTGTAGCGGTGAAATGCGTAGAGATGTGGAGGAACACCAGTGGCGAAGGCG
ACTCTTTGGC
CTATAACTGACGCTGAGGCTGCGAAAGCGTGCGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCG
TAAACGATGA
GTGCTAGGTGTTGGAGGGTTTCCGCCCTTCAGTGCTGAAGCTAACGCATTAAGCACTCCGCCTGGGGAGT
ACGGTCGCAA
GGCTGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTGGAAGCAACG
CGAAGAACCT
TACCAACTCTTGACATCCCCCTGACCGGTACAGAGATGTACCTTCCCCTTCGGGGGCGAGGGGTGACAGGT
GGTGCATGGT
TGTCGTACGCTCGTGTGCTGAGATGTTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTCCTTAGTTGCC
AGCATTAAGT
TGGGCACTCTAGGGAGACTGCCGGTGACAAACCGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCC
TTATGAGTTG
GGCTACACAGTGTCTACAATGGACGGTACAAAGGGCAGCGAAGCCGCGAGGTGGAGCCAATCCCAGAAAG
CCGTTCTCAG
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TTCGGATTGCAGGCTGCAACTCGCCTGCATGAAGTCGGAATCGCTAGTAATCGCAGGTCAGCATACTGCC  
GTGAATACGT  
TCCCGGGTCTTGTACACACCGCCCGTCACACCACGAGAGTTTGCAACACCCGAAGTCGGTGAGGTAACCG  
TAAGGAGCCA  
GCCGCCGAAGGTGGGGCAGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGA

or a sequence having more than 97% similarity with  
SEQ ID No. 1.

- 5     4.    The bacterial strain as claimed in any one of  
          claims 1 to 3, characterized in that it is thermo-  
          resistant, saccharolytic and amylolytic and/or capable  
          of producing L(+) lactate.
- 10    5.    The strain as claimed in any one of claims 1 to 4,  
          characterized by growth properties at temperatures of  
          the order of 40 to 50°C, at a pH of 5.4 to 9.15, with  
          an optimum for growth at 45°C, at a pH of approximately  
          7.
- 15    6.    The bacterial strain as claimed in any one of  
          claims 1 to 5, characterized by a guanine plus cytosine  
          content in its DNA of approximately 50 mol%.
- 20    7.    The bacterial strain deposited with the C.N.C.M.  
          on December 5, 2002, under the number I-2962.
- 25    8.    A method for culturing the bacterial strain as  
          claimed in any one of claims 1 to 7, characterized in  
          that the process is carried out under facultative  
          anaerobic conditions, at a pH of approximately 5.4 to  
          9.15, at 37°C, in particular of 6.5 to 7.5, in a basic  
          medium containing a sugar that can be used as an energy  
          source by this strain.
- 30    9.    The use of the bacterial strain as claimed in one  
          of claims 1 to 7, in food fermentation processes.
- 35    10.   A method for producing metabolites such as  
          L(+) lactate, characterized in that it comprises:  
          -    culturing a bacterial strain as claimed in any one

of claims 1 to 7, under conditions suitable for its development and for the production of the desired metabolite,

- recovering the metabolites produced, isolating the  
5 desired metabolite and purifying it.